

Diagram 10 illustrates a color transformation process. It features a curved arrow pointing from the number 10 to a mathematical equation. The equation is presented as a matrix multiplication of three column vectors, each enclosed in a vertical hexagonal frame. The first vector on the left contains the elements R', G', and B'. This is followed by an equals sign, then a 3x3 matrix with rows (r1, g1, b1), (r2, g2, b2), and (r3, g3, b3). This matrix is then multiplied by a third vector containing the elements R, G, and B.

$$\begin{pmatrix} R' \\ G' \\ B' \end{pmatrix} = \begin{pmatrix} r_1 & g_1 & b_1 \\ r_2 & g_2 & b_2 \\ r_3 & g_3 & b_3 \end{pmatrix} \begin{pmatrix} R \\ G \\ B \end{pmatrix}$$

Fig. 1 Prior art

G Values	Output values: $G \cdot g_l$
0, 1, 2, 3, 4, 5, 6, 7	$g_l(0)$
8, 9, 10, 11, 12, 13, 14, 15	$g_l(1)$
16, 17, 18, 19, 20, 21, 22, 23	$g_l(2)$
\vdots	\vdots
240, 241, 242, 243, 244, 245, 246, 247	$g_l(30)$
248, 249, 250, 251, 252, 253, 254, 255	$g_l(31)$

Fig. 2

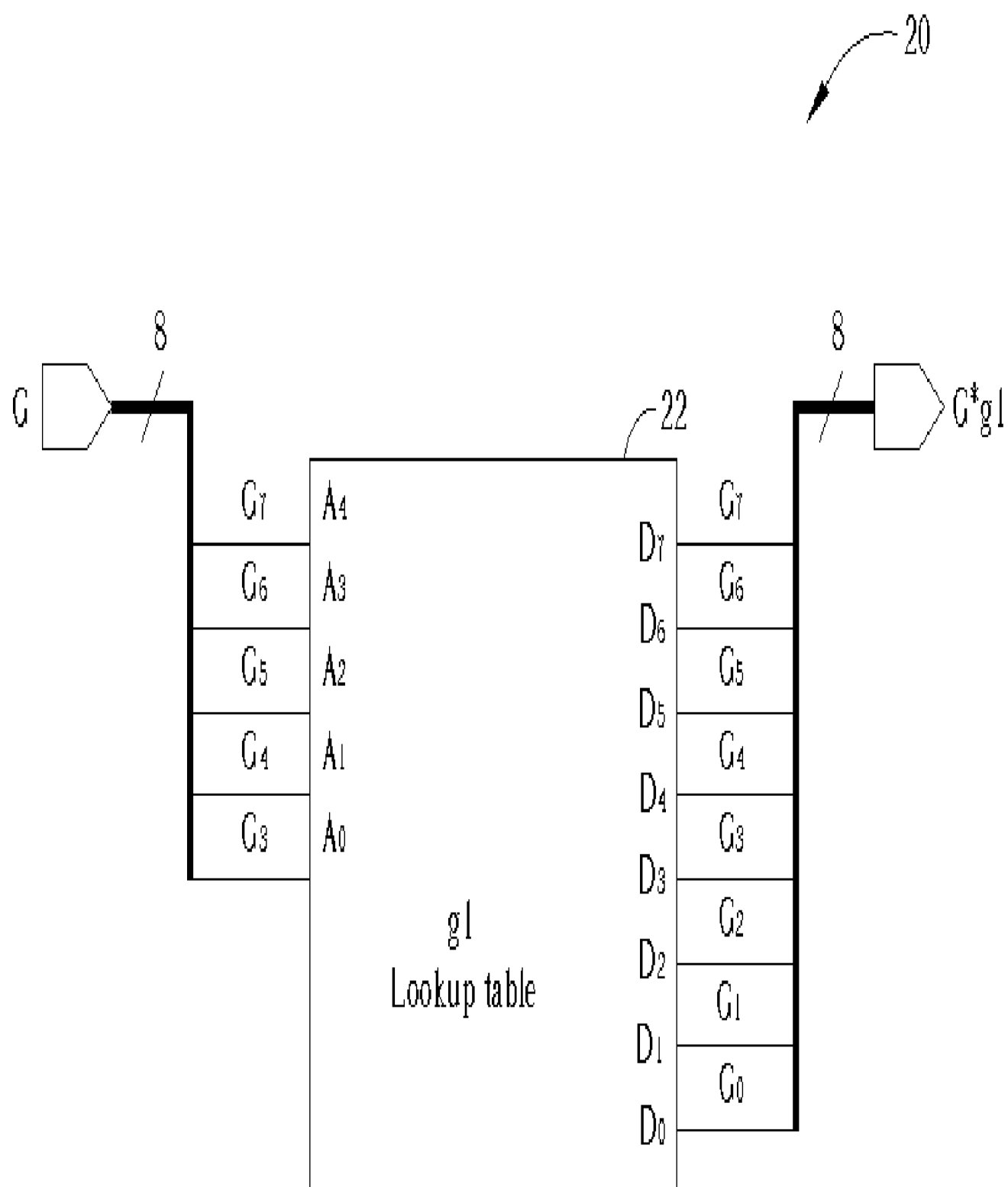


Fig. 3

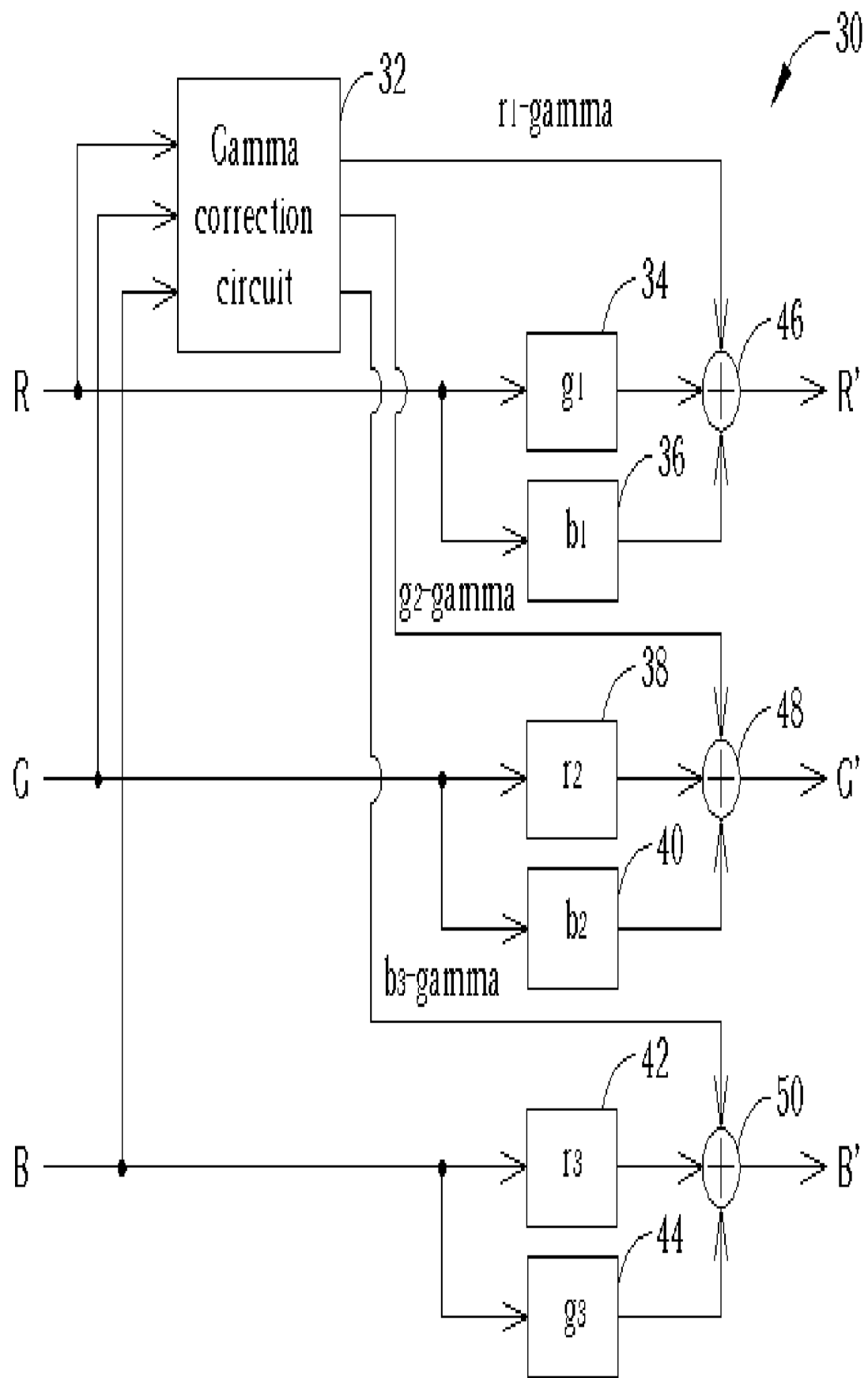


Fig. 4

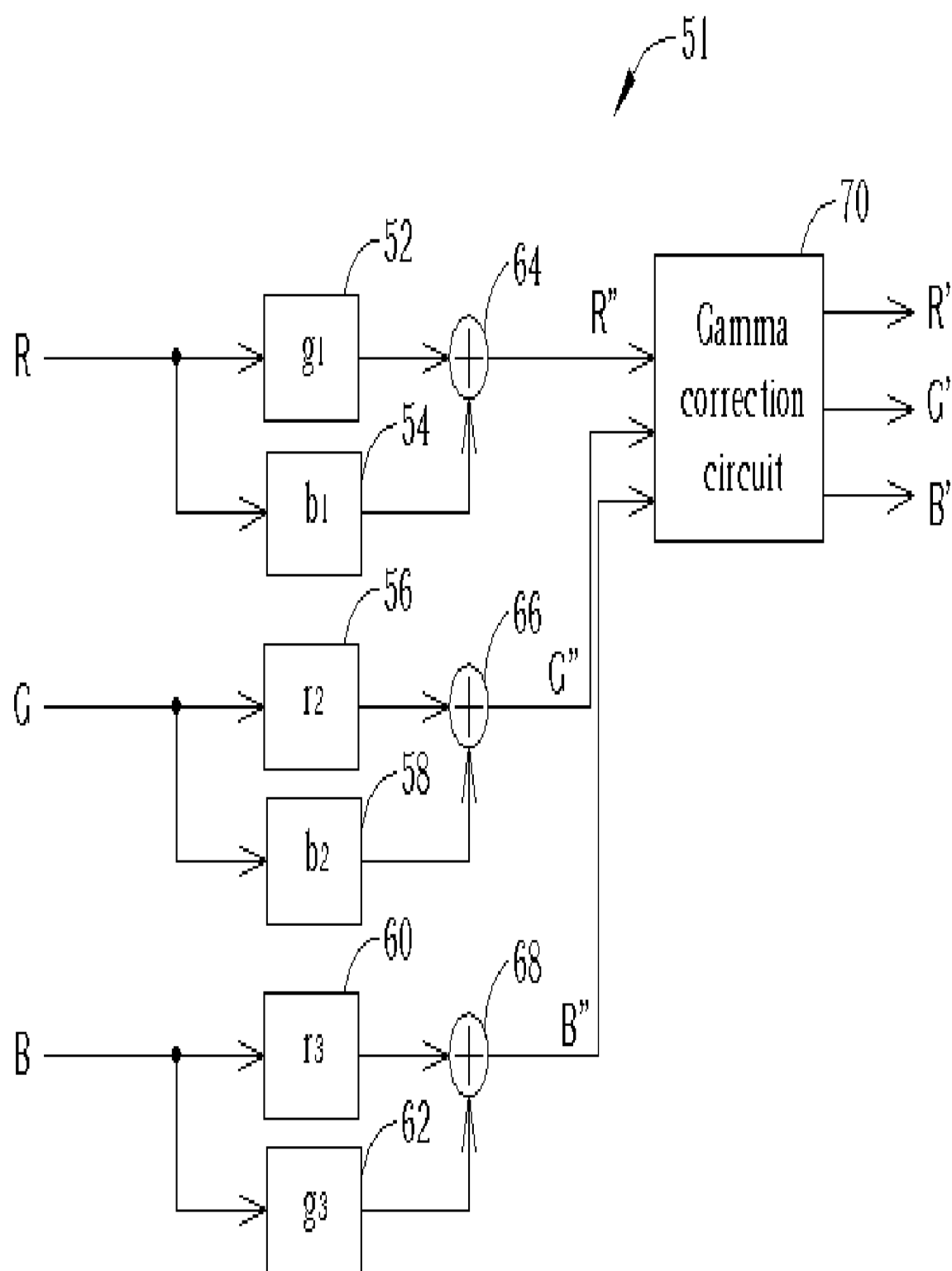


Fig. 5

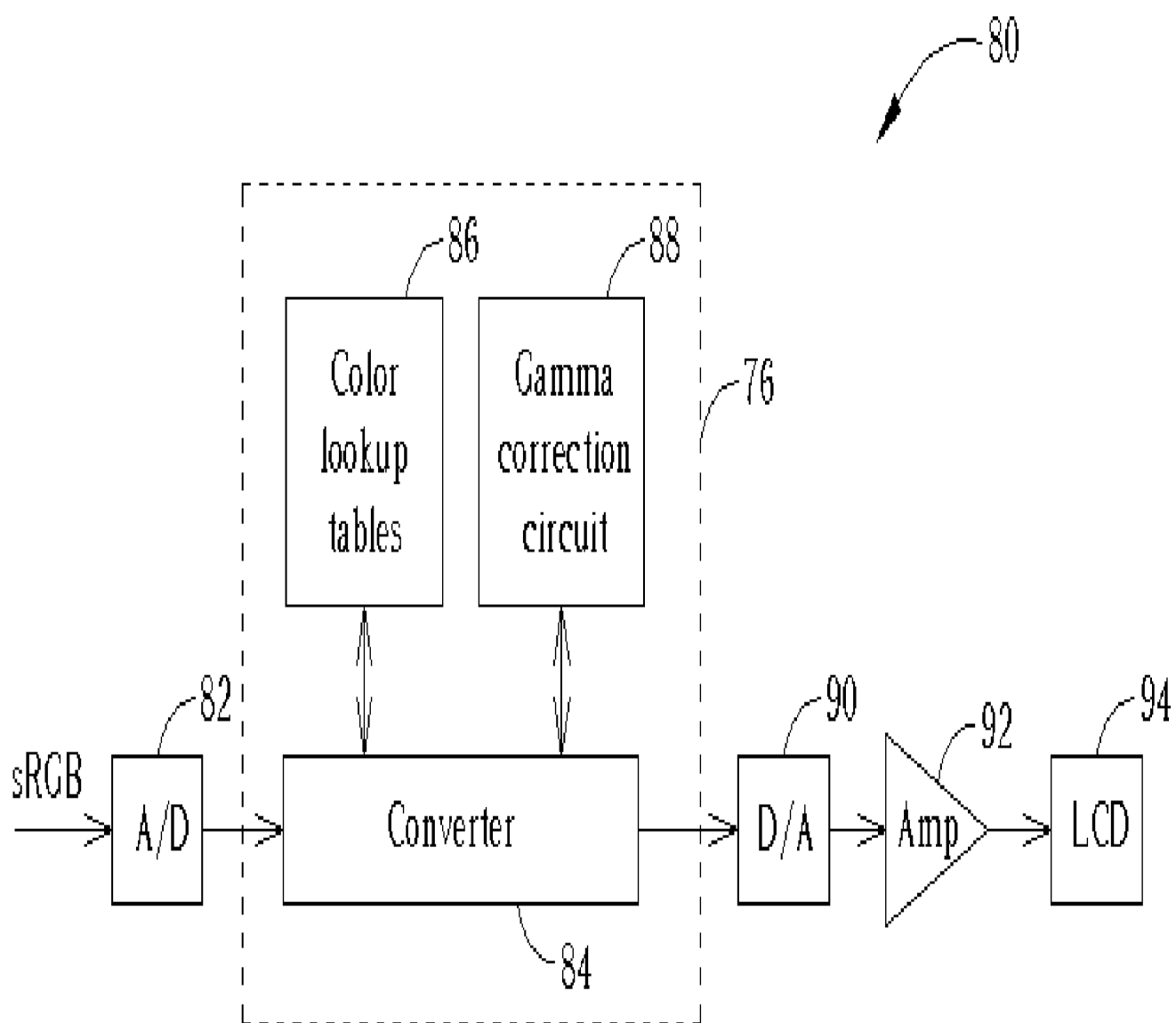


Fig. 6

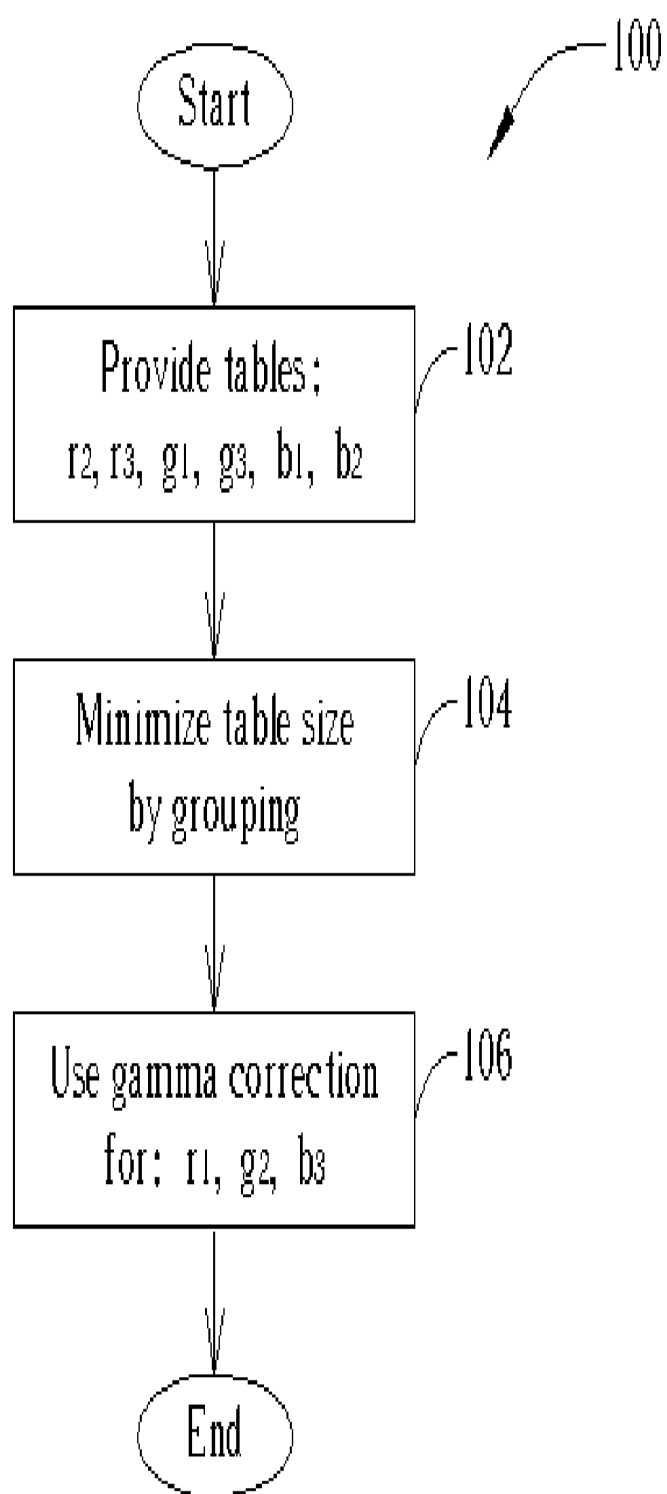


Fig. 7